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Washington

# Santa Rosa Stories Washington

By  
Jessie R. Smith





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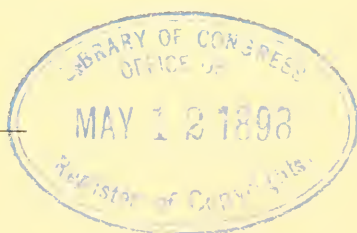
# The Story of Washington

ILLUSTRATED BY CHILDREN

BY  
JESSIE R. SMITH

AUTHOR OF "FOUR TRUE STORIES," ETC.

Revised Edition



NEW YORK  
WILLIAM BEVERLEY HARISON  
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## TO TEACHERS

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*This book is to be read by children, not to them.*

*Fifty years ago, the only tool used by the teacher in teaching reading was the school lesson-book. Since that time, the problem, both in means and purpose, has greatly broadened. The modern teacher has several ends in view and finds use for a variety of tools. In the first preliminary steps of teaching technique, the process is probably a more or less mechanical one, and the teacher still finds use for the reading-book. But once this initiation is accomplished, she finds herself in need of a variety of different*

## PREFACE

*books. She wants stories of intrinsic interest to children, which may be either read or related, for the purpose of introducing the children to literature, myth, history, and science. When he has reached his fifth school year, and generally not until then, under present rates of progress, the child is able to read such stories for himself. To meet this need, the market now offers a liberal assortment of serviceable books. But between the first-year period and this later period, there exists at present a gap, both in the child's ability to read and in the market supply of books which he can read. The child, during these years, is hungering for stories, especially for "true" stories, and some mothers and teachers try to meet the demand by reading and telling. This is well and good, but it is clear that if this*

## PREFACE

*inborn craving could be met by books, framed in language of such limited vocabulary and construction that the child in the second and third years of school could understand, and of such intrinsic interest that his attention would constantly be invited to the story rather than to the form of print, a valuable tool would be offered. Rapidity in learning to read depends upon the quantity of material read and upon the quickness with which the child's attention shall be drawn to the substance by which the process is made more or less an unconscious one. The market supply of such books is painfully weak. Those that we have are chiefly the result of the attempt of some adult to project himself into the mind and vocabulary of a child, and such attempts have not been fruitful of much success.*

## PREFACE

*This book is designed to meet this end. It is practically written by children. Miss Smith's purpose has been that of a faithful chronicler of children's language, mode of expression, and the lines of their plot interest. In this purpose she has had the advantage of a natural sympathy and instinctive "rapport" with the child mind and impulses, that, so far as my experience speaks, few persons possess. The method of the book's production has been as follows: she first related to her pupils, who were from seven to nine years of age, the story of the hero in the best form her instincts could dictate. Some days later, after the story, its form of presentation, and language have somewhat "settled" in the children's minds, she has called for reproductions, both oral and in written form, allowing the pupils also to*

## PREFACE

*illustrate their written work in any way they pleased. She has then made these reproductions the material for most careful study as to essential elements of plot, salient points of interest, and especially the words and forms of expression used by the children. By this means the story has been reconstructed. Portions over which the children love to linger are brought out to the fullest extent. Their words and forms of language, within the limit of grammatical usage, are followed scrupulously. Much care has been used to keep the stories within a limited vocabulary. Less than 750 different words are used in the entire series, and these, excepting the necessary geographical names, are all of the commonest use among children.*

*The practical idea upon which the plan*

## PREFACE

*is based is, therefore, that if there are points of interest and description which particularly and uniquely attract children, these will be the points which will be most forcibly impressed upon children's minds when they hear the story related; and further, of these points, the strongest will be the ones best remembered when the children reproduce the story. By using a comparatively large number of these reproductions, Miss Smith has gleaned the common points of interest as well as the common forms of expression. The method is therefore unique. Without attempting to formulate any principles or a philosophy of children's interests, Miss Smith has simply sought to draw the material from the child himself.*

FREDERICK BURK.

# THE STORY OF WASHINGTON.

---

## *WASHINGTON AS A BOY.*



WHEN George Washington was a little boy, he lived in Virginia. His home was near the Potomac river.

George had a big brother named Laurence.

Laurence was a soldier, and he told George fine stories. George wanted to be soldier, too. But Laurence said: "You are too small. You must wait until you are a man."

George did not like that. He said: "I want to be a soldier right now."

So he played with the boys at school. At recess, he would get his sword and call: "Fall in! Fall in!"

Then the boys would run and get in line. They would march up and down the road.

The boys thought this was great fun.

Sometimes they would have a battle. One side had cornstalks and the other side had broomsticks for guns. George was the best captain, and his side always won.

## THE STORY OF WASHINGTON.



THE BOYS PLAY SOLDIERS AT RECESS  
(PHILIP REDMOND—age, 12.)

One day George's father gave him a new hatchet. It had a pretty red handle. George was very proud of his new hatchet. He went around cutting everything. He said he wanted to see how sharp it was.

By and by, he came to the orchard. His father had a fine young cherry-tree there.

George saw the tree, and said: "I wonder if my hatchet can cut this tree?"

He looked and looked at the tree. Then he felt the edge of the hatchet. He shook his head and said: "No; I guess it is n't sharp enough."

But he thought he would try it anyway.

At the first blow, the tree fell down.

## THE STORY OF WASHINGTON.

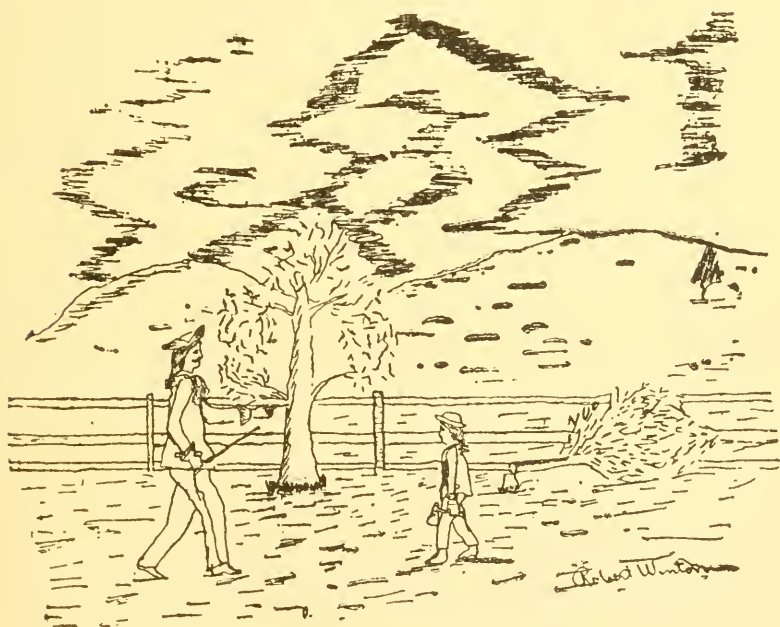
Now, poor George felt very sorry. He did not know what to do.

He tried to set it up again, but it would not stay. So he picked up his hatchet, and went to the house.

After a while his father went out to look at his cherry-tree. He saw it lying on the ground.

He said: "What is the matter with my tree? Some one must have cut it. I will ask George about it."

So he called, "George! George! Come here."



GEORGE AND THE CHERRY-TREE.

(ROBERT WINTON—age, 12.)

George came, and his father said: "Look at my cherry-tree. It is dead. Do you know who cut it?"

## THE STORY OF WASHINGTON.

"I did," said George.

"Why did you do it?" said his father.

"I was trying my new hatchet. I wanted to see how sharp it was. I didn't think it would hurt the tree."

"Well," said his father, "it was a fine tree. I am sorry to lose it, but I am glad my boy has told me the truth."

When George was eleven years old his father died. His mother took care of the farm. She had a very fine colt.

One morning, George and Laurence went into the field to see the colt. Some other boys went with them.

George said: "I guess I will ride the colt."

But Laurence said: "No; you must not. It will throw you off."

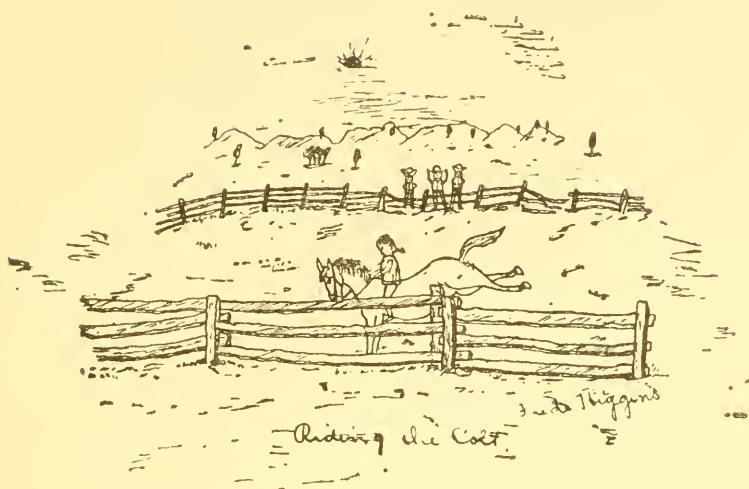
"Boys," said George, "if you will catch him, I will ride him."

Laurence said: "No; don't you do it. You will get hurt."

But George would not listen, and said: "Go on, boys; I am not afraid."

So they chased the colt up into a corner. They threw the bridle over his head. Then George jumped upon his back. The poor colt was so frightened. No one had ever been upon it before. It ran and jumped and kicked. It tried and tried to throw George off, but he held on very tight. Then it gave a big jump and fell down. The boys

## THE STORY OF WASHINGTON.



GEORGE RIDES THE COLT.

(FRED. HIGGINS—age, 12.)

tried to get it up, but the colt was dead. It had broken a blood-vessel.

Poor George said: "I am so sorry. But I will go and tell my mother."

The boys went home. George and Laurence went to the house. Their mother said: "Well, boys, I saw you in the field. How is the colt this morning?"

"It is dead," said George.

"Dead!" said his mother. "Who killed it?"

"I did," said George.

"You! Why, how could you kill it?" said his mother.

Then George told her all about it.

At first his mother was angry. Then she said: "I would rather lose the colt than have my boy tell a story."

## IN THE WOODS.

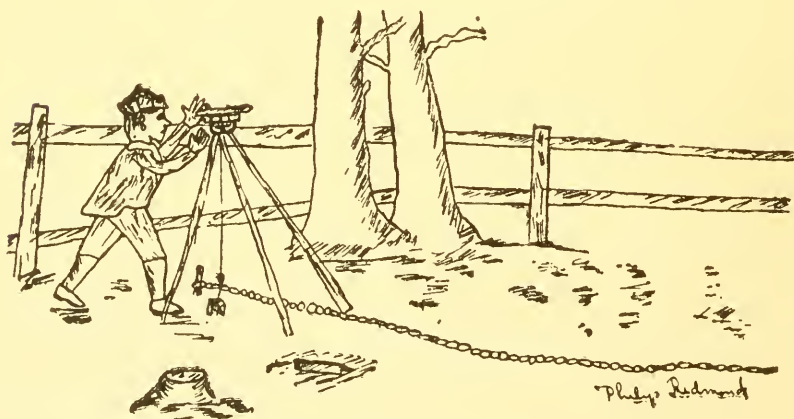
GEORGE went to school until he was sixteen. Then he went to see his brother.

Laurence had a pretty home. It was on the bank of the Potomac river. He called it Mt. Vernon.

One day George threw a stone clear across the river. He was the only boy who could throw so far.

By and by, he went to survey some land. He took one man with him. This land was away out in the woods.

George had to ride over rough roads and climb steep hills. Some of the streams were so deep that his horse had to swim across.



GEORGE GOES SURVEYING.

(PHILIP REDMOND—age, 12.)

George and the man worked hard all day. They measured the land with a long chain.

## THE STORY OF WASHINGTON

At night they did n't know what to do. They had no place to sleep. There was n't a house in the woods.

So they built a big fire. Then they made a bed of leaves. One night the leaves caught fire. George was fast asleep, but the man woke up.

He jumped up and called: "George! George! Get up. You 'll burn up!"

But George did not move.

Then the man shook him.

George opened his eyes, and said: "What do you want?"

"Get up quick," said the man; "the bed is on fire!"

George got up, and they put out the fire. They had a good laugh about it. Then they went back to bed.

They shot birds and deer for food. They put the meat on a stick, and cooked it over a fire.

The first day, the man said: "Dinner is ready. Please hand me the plates."

"Plates!" said George. "You know we have n't any."

"Yes; we have," said the man.

"Where are they?" said George.

"See that tree. Well, take this ax and cut some chips. They will do for plates."

"They will be fine," said George, "and we won't have to wash them."

One day a band of Indians came along.

They said: "How do you do, white men? Do you live here?"

## THE STORY OF WASHINGTON.

"Yes," said George; "sit down and stay a while."

So they sat down before the fire. George gave them something to eat.

Then the chief said: "We will dance for the white men."



INDIANS DANCING FOR GEORGE.

(LEE TURNER—age, 11.)

First they made a drum. They took a pot that was half-full of water. Then they put a skin over it.

One of them drummed, and the others danced around and around. Then they yelled and shot their arrows.

George thought that they were very strange. They were the first Indians he ever saw.

He talked with them a long time. They showed him how they fought in war. They hid behind trees and rocks, and shot with their bows and arrows.

George lived in the woods for three years. Then he went back to his home at Mt. Vernon.

## *FIGHTING THE FRENCH AND INDIANS.*

**T**HE French people lived in one part of America ; the English people lived in another part. They both wanted the land lying along the Ohio river.

The Indians wanted this land, too. They said : "The land is ours. We were here first."

The French people said : "You help us. We are your friends."

"What will you do?" said the Indians.

"We will drive the English away. Then all the land will be ours," said the French.

"That is a good plan," said the Indians, "and we will all help you."

So the French built a fort on the Ohio river.

This made the English very angry. They said : "That is our land. The French have no right there. Let us fight."

The governor of the English said : "No ; not yet. I will tell them they must go away."

"They won't go," said the people.

"Then we will fight them," said the governor.

So he sent for George Washington. He said to him : "Some French people are on our land. Will you go to see them for me?"

"Yes," said Washington. "What shall I do?"

The governor said : "Tell them the land is ours. They must go away, or we will fight them."

The next day Washington set out for the fort. He took one white man and some friendly Indians with him.

## THE STORY OF WASHINGTON.

He dressed himself like an Indian. They all carried guns.

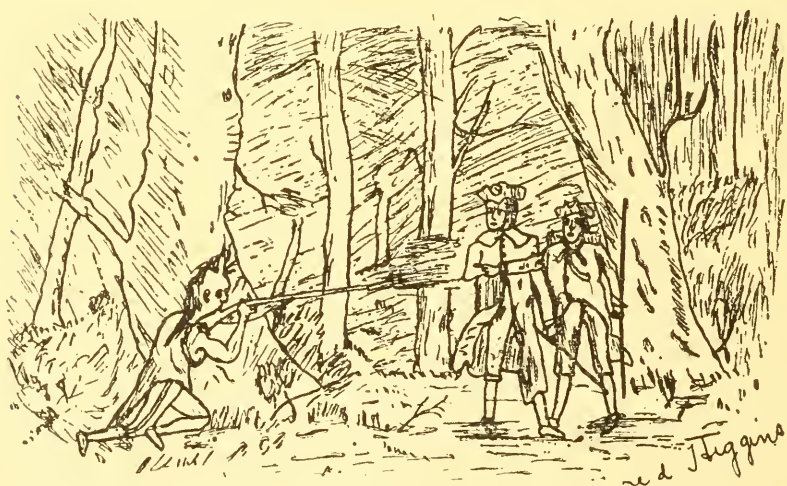
When they got to the fort, the French people said: "No; we will not give up this land."

"But it is ours," said Washington.

They said: "We have come here to stay. If the English people do not like it, they will have to fight."

Then Washington started back to Virginia.

The Frenchmen told the Indian guide to kill Washington, if he could. So, one day, the Indian shot at Washington, but did not hurt him.



THE INDIAN GUIDE SHOTS AT WASHINGTON.

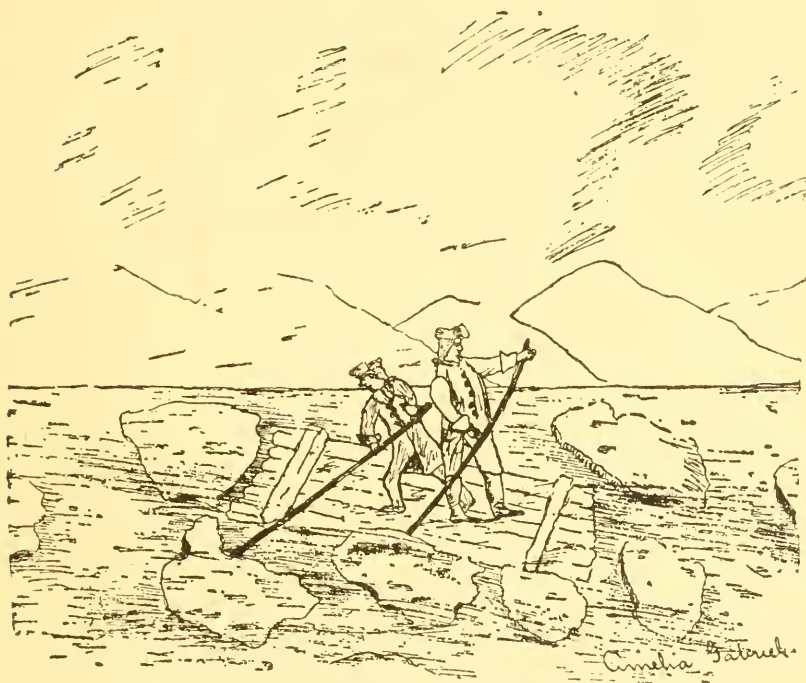
(FRED. HIGGINS—age, 12.)

After that, Washington and the white man left the Indian. They went on by themselves.

By and by, they came to a river. It was full of big blocks of ice

## THE STORY OF WASHINGTON.

They made a raft and pushed it along with poles. Washington's pole slipped, and he fell into the water. He had to swim to the shore.



CROSSING ON A RAFT.

(AMELIA GABRIEL—age, 13.)

The man said: "Let us stay here to-night. I will make a fire. Then you can get dry."

But the wood was too wet to burn. So they went on. They walked all night.

By and by, they came to Virginia. Washington told the governor what the Frenchmen said.

The governor said: "All right; we will fight them. The land is ours, and we will have it."

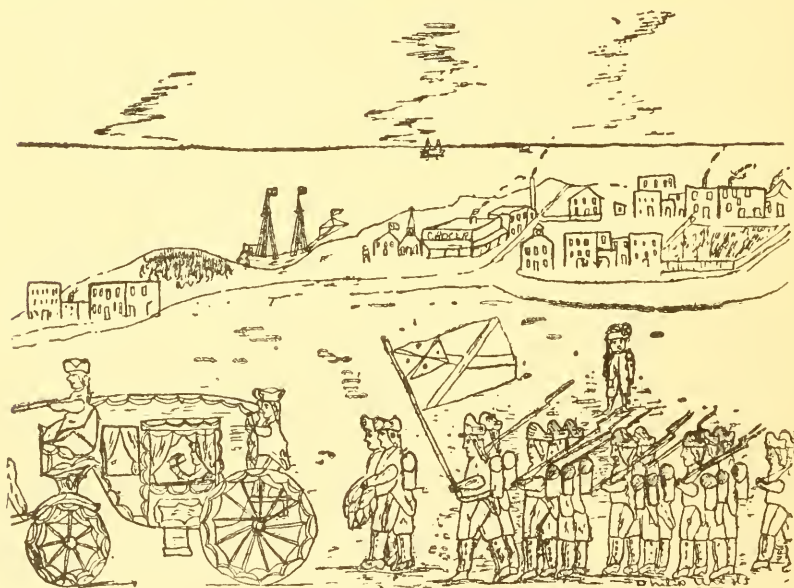
## IN BATTLE.

**T**HE king of England sent over a fine army. Their leader was General Braddock.

The governor made Washington captain of a little army. He sent him with Braddock to fight the French.

Braddock's army were good soldiers. They wore bright red coats.

Washington's men had never been to war. But they knew how to fight the Indians.



BRADDOCK RIDES TO WAR.

(PHILIP WRIGHT—age, 11.)

The soldiers looked very fine as they marched away.

All the people stood on the sidewalk to watch

them go by. Drums were beating and flags were flying.

General Braddock rode in a fine carriage. His officers rode on horseback. Then came a long line of soldiers in red coats.

Soon they came to the woods. Now, there were no roads. They had to go along paths. They cut down trees and built bridges to cross the rivers.

Braddock was very proud of his army. He said to Washington: "See my fine soldiers. It won't take us long to drive the French away."

Washington said: "Yes; they are good soldiers. But they don't know how to fight the Indians. Let my men go first."

"No," said Braddock; "my men must go first. They know how to fight. They are not afraid of the Indians."

"Your men won't see the Indians," said Washington.

"How can they fight us, then?" said Braddock.

"They hide in the woods. They fire from behind trees and rocks," said Washington.

But Braddock would not listen to Washington.

The next day they were near the fort. They had to march up a long hill. Washington again said: "Let my men go first. They are used to the woods and to the Indians."

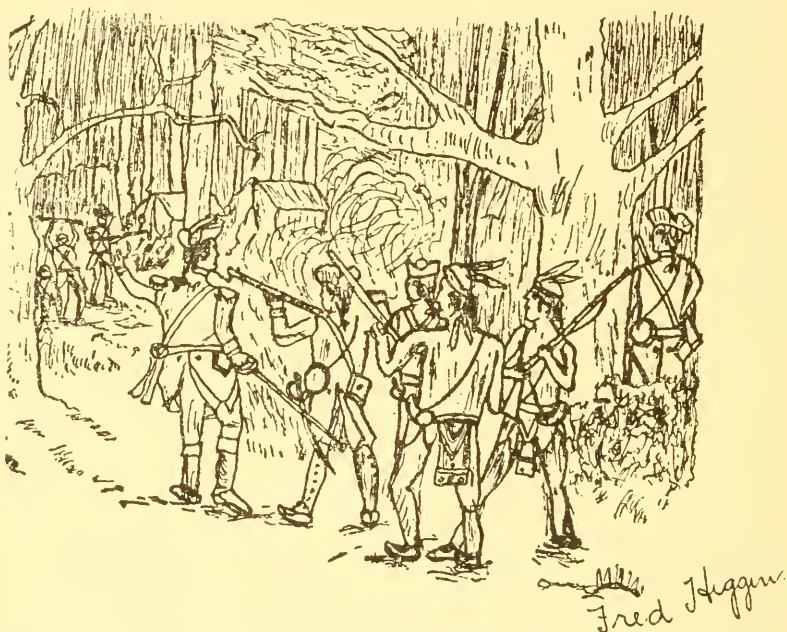
This made Braddock angry. He was an old soldier. He thought he knew more than Washington.

He said: "No; my men must go first."

## THE STORY OF WASHINGTON.

So on they went. Everything was very quiet.

All at once they heard the war-cry of the Indians. Then came shot after shot. Indians were behind every tree, shooting and yelling.



FIGHTING THE INDIANS.

(FRED. HIGGINS—age, 12.)

The English soldiers were falling down on every side. The others did not know what to do. They could see no one. They did not know where to fire. They were more afraid of the yelling than of the shots.

Braddock rode in front of his men. He called out, "Keep in line! March up the hill!"

But the soldiers would not move. By and by, poor Braddock was killed. Then Washington

## THE STORY OF WASHINGTON.

came up with his men. They did not march in a line. They got behind trees and rocks.

When an Indian put out his head, they fired at him.

Washington rode up and down in front of the army. He had two horses shot under him. Four bullets went through his coat, but he was not hurt.

Washington saved the English army. He kept the French and Indians back, while the English soldiers went home to Virginia.

That night he took his men to Virginia, also.

This war with the French lasted seven years. When it was over, the English had all the land east of the Mississippi river. The French could not live there any longer.

After the war, Washington went back to Mt. Vernon.

---

## *THE BOSTON TEA-PARTY.*

WASHINGTON was glad to be at home again. He wanted to take care of his place. He liked to hunt and fish. He said he did not want to be a soldier any longer.

But soon there was another war. And Washington helped the people.

At this time there were many people in America. Every one was happy. They had cleared the ground. Their homes were good.

But the king of England said: "These colonies

## THE STORY OF WASHINGTON.

in America are mine. I must have some of their money."

He thought and thought how he could get it.

Then he said: "I will send over some soldiers. They must pay for them."

The people said: "We are not at war. We do not want any soldiers."

"They will help you keep the French away," said the king.

"But we are not afraid of the French," said the people.

The king sent the soldiers anyway.

Then the people said: "We will not pay for them."

The king said: "Pay the money, or I will take it away from you."

"But," said the people, "you have no right to do that. If you try to take our money, we will fight."

The king sent over men to get the money. But the people would not pay it.

Then the king said: "I will tax them."

He put a tax on many things the people had to buy. The people did not like this. They said: "We will not pay it."

First, the king put a tax on paper. The people said they would not buy any paper.

They sent Benjamin Franklin to England to see the king. He was one of their wise men. They thought the king would listen to him. They did not want to fight the king. England was their old home. They all loved it.

## THE STORY OF WASHINGTON.

They said: "We will buy your goods. Your ships may come here. But you must not tax us. We must be free."

But the king would not listen. He wanted their money.

So he said: "Pay your taxes. Then you will be free."

The people said: "No; we will not pay the taxes."

Then the king said: "Every one drinks tea. I will put a tax on it. All the tea must come in English ships."

"We won't use any tea," said the people; "we will drink water."

One day three ships came into Boston. They were loaded with tea. That night the people had a big meeting.

They said: "Shall the tea be landed?"

"No, no," cried the men; "it can't land. We won't pay the taxes on it."

So the ships stayed at the wharf. That night the sailors heard a strange noise.

"What is it?" they said.

But no one knew. They all ran on deck. They saw a great band of Indians on the wharf. They had long feathers in their hair. Their faces were painted. They were dancing and yelling.

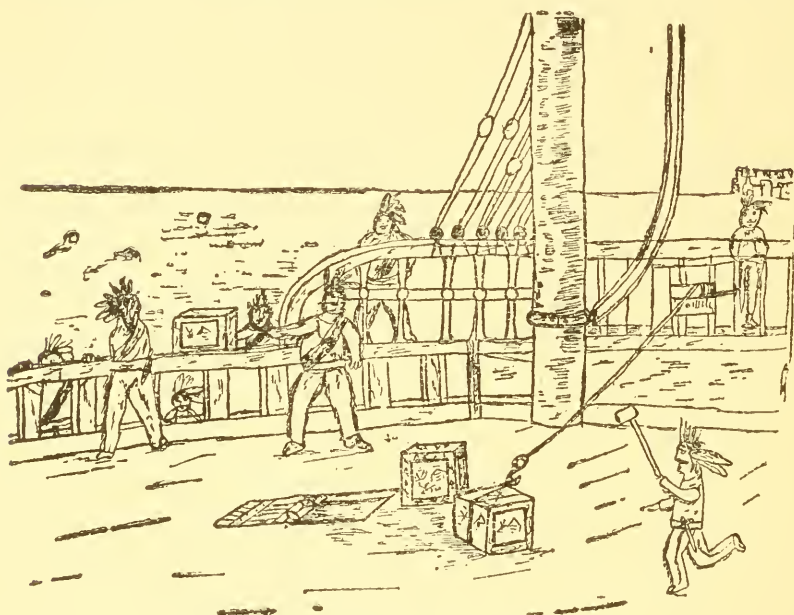
The English sailors were frightened. They had never seen any Indians before. The Indians came nearer and nearer. Now they were on board the ship.

## THE STORY OF WASHINGTON.

"What do you want?" cried the sailors.

"Tea, tea, tea!" yelled the Indians.

They soon found the tea. They did not take it on shore, but splash, splash, it went into the water.



THROWING THE TEA OVERBOARD.

(PHILIP WRIGHT—age, 11.)

When the tea was all gone, the Indians left the ship. This time they were not yelling. Their paint and feathers were gone.

The sailors saw that they were not Indians at all. They were Boston men.

The men laughed at the sailors, and said: "Well, now your tea is gone, I guess you can't make us pay any tax on it."

"You will see," said the sailors. "You will have to pay for this."

## THE STORY OF WASHINGTON.

"We are not afraid," said the men.

The next day the ships went back to England. The king was very angry. He said: "I will punish those people. We will have a war."

The people said: "If we have a war, we must have George Washington to help us fight."

So they sent for him. He left his home at Mt. Vernon, and went to Boston. There he took charge of the army.

---

## THE REVOLUTIONARY WAR.

THE king sent over a great many soldiers from England. They were all good soldiers. They wore bright red coats. They had plenty of money.

Washington had only a few men. They had guns but only a little powder. His men were very brave. They all knew how to fight.

One day they were in camp. A soldier said: "Let us put up a mark and shoot at it."

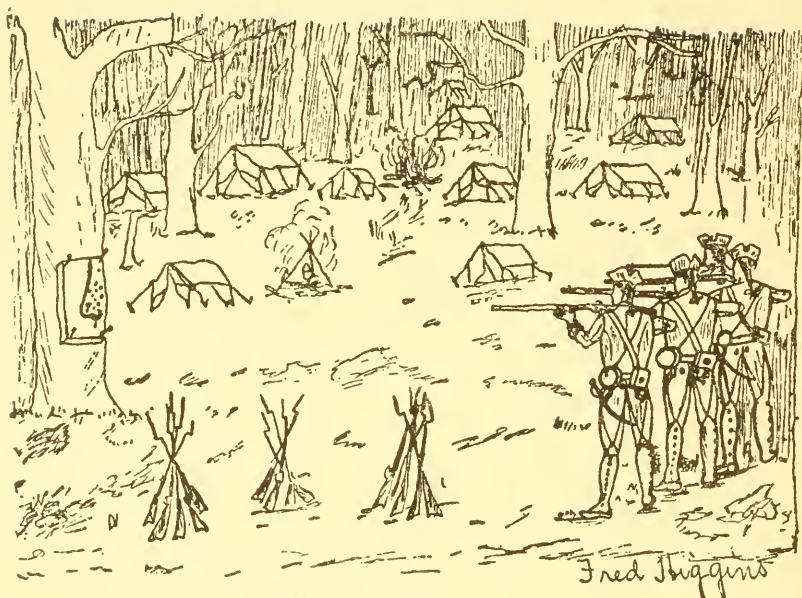
"All right," said the others. So they set up a board. They drew a man's nose on it for a mark. They all shot at it. Sixty of the men hit the nose.

"Well," said Washington, "my men are fine shots."

They laughed and said: "Yes; the English had better look out for their noses."

They had been at war for over a year. Neither side had won.

## THE STORY OF WASHINGTON.



SHOOTING AT THE NOSE.

(FRED. HIGGINS—age, 12.)

The king said: "I must win this war." So he sent over a larger army.

The Americans did not know what to do. They did not want to fight forever.

So they had a big meeting at Philadelphia. Men from all the colonies met there.

They said: "Shall we let England rule us?"

"No, no!" cried the men.

"Shall we be friends, and let the king tax us?"

"No, no!" cried the men.

"Well," said they, "shall we be free?"

"Yes, yes!" they all cried.

So the men set to work. They wrote out a paper. It said America is free, and an English king could not rule in America any longer.

## THE STORY OF WASHINGTON.

This paper was called the "Declaration of Independence." All the men of the meeting wrote their names on the paper. This was on the Fourth of July. Benjamin Franklin helped to write this paper.

All the people were so happy. They rang bells and fired guns. Flags were flying and bands were playing. Men and boys marched up and down the street.

They cried: "Hurrah! Hurrah! We are free! We are Americans."

That was the first Fourth of July.

Now, every year, we celebrate the day.

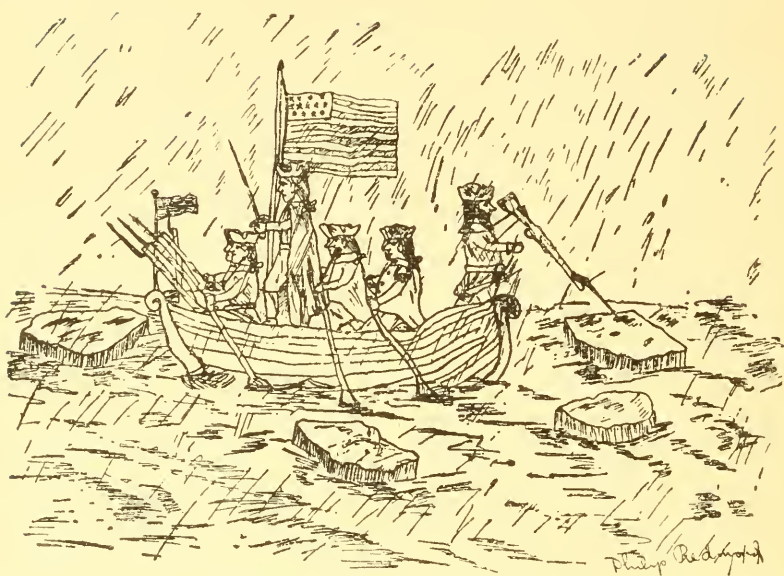
The Americans said: "Now we are free, we must not use the English flag." So they made a flag of their own. It was red, white, and blue. There were thirteen little white stars. They were up in a corner, which was blue. Then there were thirteen stripes. They were red and white.

Now, the king thought he did not have enough soldiers. So he sent to Germany and hired some.

One time, those soldiers were camped by the Delaware river. Washington was on the other side. Washington wanted to fight those soldiers. So his army crossed the river in little boats. It was Christmas night. The snow was falling thick and fast. The river was full of great blocks of ice. The boats hit against the ice. They all thought they would be lost.

By and by, they reached the other side. It was very dark, and the wind blew. The snow fell faster

## THE STORY OF WASHINGTON.



CROSSING THE DELAWARE.

(PHILIP REDMOND—age, 12.)

and faster. Big drops of hail fell on the poor tired soldiers. It was so cold that two of the men were frozen to death.

Washington and his men marched very quietly.

They soon found the German soldiers. They were all fast asleep.

Washington and his men ran upon them. The noise made the soldiers wake up. They tried to get away. But Washington and his men pointed their guns at them. Washington called out: "Be our prisoners, or we will shoot you."

They cried: "Don't shoot. We will give up."

So Washington took them all prisoners. Then he crossed the river with them.

Washington had a hard time that winter. It

## THE STORY OF WASHINGTON.

was so long and cold. The poor men were ragged. Their shoes were worn out. They put cloth around their feet to keep them from freezing.

Washington was always kind to his men. They tried to do their best for him.

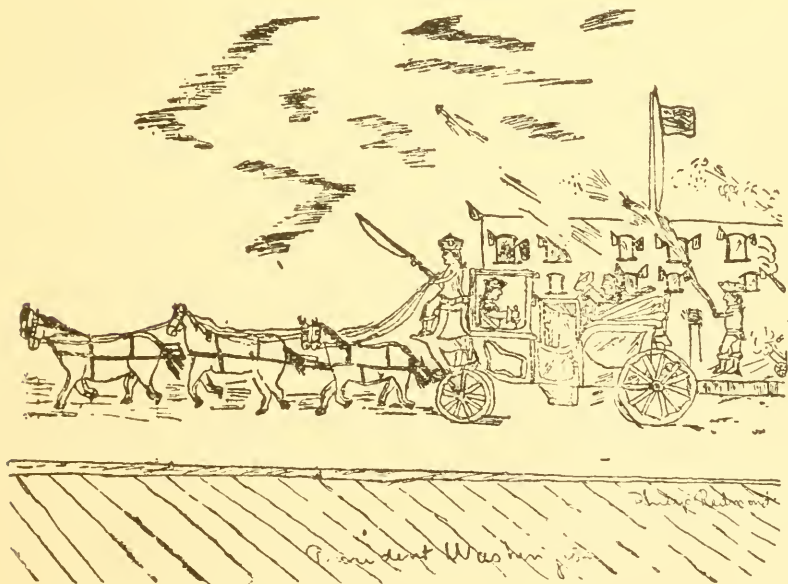
This long war lasted for eight years. But when it was over, America was free. An English king could not rule here any longer.

Washington said: "Now I am through fighting, I will go home." So he went back to Mt. Vernon.

But the people wanted a President.

They said: "We must have the best man in America. Who shall it be?"

"Washington! Washington!" cried the people.



WASHINGTON AS PRESIDENT.

(PHILIP REDMOND—age, 12.)

## THE STORY OF WASHINGTON.

So he left his home and went to the big city of New York. There he was made President. He rode in a fine carriage. It was drawn by six white horses. The people cheered as he rode along.

Little children sang songs and threw flowers in the street.

Every one was so happy!

Washington was President twice.

Then he went back to Mt. Vernon. He lived only two years longer. Then he died.

Every one loved him. He made America free, and was our first President.

He is called the Father of our Country.



SAMPLE PAGES OF

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SIMPLE LESSONS

IN THE

STUDY OF NATURE

*FOR THE USE OF PUPILS*

BY

ISABELLA G. OAKLEY

Come forth into the light of things,  
Let Nature be your teacher.

*ILLUSTRATED*

NEW YORK  
WILLIAM BEVERLEY HARISON  
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1895

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## PREFACE

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IN this new contribution to the rapidly increasing list of nature lessons, the author offers the novelty of a question book, with answers withheld until observation and experiment suggest them; thus a sort of inductive lesson-book with the object in the foreground and the teacher behind the scenes. If the topics are of sufficient interest to children, there is no need to doubt their willingness to puzzle out the conclusions which the lessons imply. When we recall the persevering curiosity with which they take their toys to pieces to see how they work, we may rely upon some ability to follow up Nature in her work.

Like all other observation lessons these are intended to develop thought; but further to

introduce intelligently the study of botany, zoölogy, and (to a small extent) natural philosophy.

As science lessons they may appear meager and loosely connected ; but as inductive lessons they have their real unity. This first book is adapted to children of the average age of nine years, and contains work for one year ; but taken together with advanced numbers suited to a higher grade, will form, it is believed, not only foundation for thoughtful and productive study of these particular sciences, but a stimulus to the love of nature and of truth.

It is constantly urged that these interesting and important branches of study should be begun early and carried along from year to year, to the point of some real attainment : and this will be possible when they are presented in books that are helpful alike to pupils and teachers. This contribution to that end is earnestly recommended to the favor of thoughtful teachers.

The illustrations are comparatively few. Since the lessons are confined to the common objects that surround the daily life of all, the material for study is easy to obtain. To strew it with pretty pictures would defeat the purpose of the book. Some of the drawings were made in the Agassiz Museum of Comparative Zoölogy at Harvard.

ISABELLA G. OAKLEY.

GREAT NECK, N. Y., 1895.



## INTRODUCTION TO TEACHERS.

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Is here another tiresome book of object lessons, with a string of cut-and-dried questions and answers about some pictures, assuming general ignorance and stupidity, and failing to lessen it?

Have patience, dear fellow teacher, while I briefly attempt to remove your prejudice and secure your approval of these, my Nature Lessons.

Too much has been asked of busy instructors, in the demand for oral teaching of natural sciences, and the most conscientious know best how great a failure it becomes. I now offer these lessons, which are real, all having been worked out inductively by little children under my instruction; and by the novel mode of presenting them as questions to be

studied with the object in hand, I have sought to relieve the teacher's work and to refrain from doing the pupil's thinking.

The questions found in his own book, in periods assigned for preparing lessons, will arouse and guide the child's curiosity, and prepare him to become the intelligent questioner when the delightful lesson time arrives. The Summaries (printed at the end) supply the teacher the means to give direction and precision to his thoughts. They are a sort of key to the subjects of inquiry, reduced to brief and careful statements. It would be best for a teacher to get familiar with all the Summaries belonging to a chapter, before entering upon it, to anticipate, by repeated reminders, the need of material, and then to withdraw, as it were, and let the lessons do their work; only guiding, *never telling* until the time comes for the summing up. Then, by dictating or otherwise presenting the Summaries, he reappears as the one who must throw the light and settle the

doubts. Such a book can advantageously be kept open in recitation—as any good school book may always be when teachers are doing the best books permit. Thus, though flights of fancy may be indulged, too great discursiveness is held in check, and the minds of the children are easily brought to settle strongly around a few clear points.

Many devices are sought to enable the class to linger around a topic, for I would insist on two cardinal points of advantage: give time for the thought to develop; and let the pupils do most of the speaking, if it is only to read aloud the questions, and frame answers as well as they can.

In the lessons in biology there is usually a discovery to be made of the *adaptation of an organ to its function*. This gives the fundamental unity of inductive science lessons to what at first may seem objectionably heterogeneous topics. Nature lessons cannot be pursued in the consecutive order of the

development of life, as they are presented in books depending upon pictures for illustrations. The material for illustration must be available; hence, in these simple lessons, I have limited my choice of topics to such as can be studied from life. The few pictures are wholly subordinate. *No lesson should be allowed to proceed without a full supply of material*, enough for all to handle. It is a good plan, in a large class, to divide it into groups under the leadership of a few responsible pupils.

A word further upon the usefulness of giving such a book to pupils. By possessing a book, they get opportunity to reflect; to review the points that have not been well understood; to put to-day's work with yesterday's, and to repair the losses of absence. A responsibility for the lesson can be much more readily educated with a text-book than without one; this very important point is one too much lost sight of by the advocates of oral teaching, now so positive of its value.

All the means of expression are in constant requisition—as much correlation of studies as any could ask; but the best results can only be reached in classes where children are encouraged to talk freely. Speech training is what our schools have yet to do. When *yes* or *no* is the only answer, something is wrong.

Finally the lessons appeal to the heart; not only by the interspersed poetry, which should be learned and relearned, but by the opportunities they frequently present of giving an uplift to the feelings. Those who are on the outlook for such opportunities are doing the best work that falls within a teacher's reach.

Notes to teachers are scattered throughout the book; to many they will seem superfluous: to some they may carry hints about the conduct of the lessons which they can profitably use. They are not trammels nor do they assume that all would not go well if they were absent. Some of them contain information that will be useful as a background of thought;

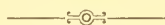
many are only reiterated persuasions to keep within the author's purposes in the use of the lessons.

One other word about the Summaries. Though they serve their chief purpose in giving concise expression to thought, they are also a means of securing neat, orderly notebooks, where the little compositions and drawings will naturally appear. But do not let it be pretended that this is "laboratory work," nor expect of infancy valuable records of measurements and dates, of seed-time and harvests. Those who believe in training the memory by rehearsing sentences that have fully taken hold of the understanding, may make them serve that use.





# SIMPLE LESSONS IN THE STUDY OF NATURE.



## CHAPTER I.



### F E A T H E R S .

#### LESSON I.

**Preparation :** Have a supply of stiff feathers from the wing or tail of a bird.

Where did you find your feathers ?

Do you know what part of the bird they grew on ?

To-day we want only these large ones that came from the wing or tail.

Lay one across your hand ; how does it feel ?

Could you hold a great pile of them easily on your hand ?

What is the part called we hold the feather by?

(Have new names written on blackboard, and discussed as *words*.)

Write **quill**. It extends all through the feather.

Compare the upper and under surfaces of the feather.

Are the surfaces of the feather alike? At the same time, notice the difference in the form of the quill.

Keep the upper surface of the feather toward you, and see whether on the right side of the quill it grows as it does on the left.

Draw a feather, and try to draw the quill in just the right place.

Can you see through the quill? How is it made? Would not a solid quill be better?

Try to tear the feather; is it tough? Can you easily destroy it?

Try to bend it; is it stiff?

Which side of the quill is the stiffest?

Now tell what things we have observed in the feather.

Write the Summary.  
(Teacher see Introduction.)

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## LESSON II.

You will see something very curious now about a feather, something I dare say you have never before seen.

Hold it to the light, look through it. See how far you can stretch one side without pulling it apart. Now draw it between your thumb and finger downward toward the hollow quill, and then back to the point. Do this several times, very gently, all the time keeping it toward the light.

Can you make the parts close up perfectly again, after you have separated them?

What makes the little pieces hold together? Be sure you look well. Some children think it is gum that sticks the threads together; is it?

When you pull two clusters very gently apart, find out just what takes place; but do it slowly: hold it between your eyes and the light, or you will miss seeing a curious thing. It is very fine, and not easy to see. What do you find along the edges of the threads?

If you can look through a small magnifying glass, you will see the very nice method of latching which these hooks have.

You ought to look at many different ones, until you find some that behave differently.

What, then, holds a feather together and makes a fine stiff plume out of a thousand little strings?

Write the Summary.

(Teacher see Introduction.)

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### LESSON III.

**Preparation :** Bring some soft little feathers, such as grow on a bird's breast.

Is this feather like the wing-feather we had yesterday?

Tell three things about it that make it different.

Where did you get this feather? On what part of a bird does this one grow?

How are its barbs and barbules formed? Do they lock together?

Is this feather light? Is it stiff?

Do you use such feathers at your house?

If you should put your hand into a bag full of them how would they feel?

Of what use are such little feathers to a bird?

Why must a bird keep its eggs warm?

Do birds keep warm in cold weather?

If you know something about the down that grows on birds in cold countries you may tell it.

I think of some very large feathers that are loose and soft like this, throughout; they grow on a remarkable bird. What are they?

Bring the wing-feathers and the breast-feathers to-morrow.

Write the Summary.

## LESSON IV.

Write all you know about feathers.

(Teacher may dwell at some length on the use the mother bird makes of her downy breast. Enlist sympathy for the preservation of creatures so full of instinct and so beautifully made.)

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## LESSON V.

Lay both feathers side by side. Dip the wing-feather under water, and take it out quickly. Do this several times. Let it lie on the water. Or pour water over a wing.

Is the feather wet?

Why does the water slip off?

Is it wet through?

Can you make water run through the close barbs?

Try to wet the down of the breast-feather.

Of what use is the wing in rainy weather?

Count the feathers that are overlapped in a wing. We say the wing is folded when the feathers are all drawn together—this way.

Can birds get out of the rain ? How do they keep dry ?

Write the Summary.

(Do not hurry the observation in this lesson. Try to let everyone see, by repeated trials, how the water slips off.)

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## LESSON VI.

The dove with whistling wing of blue  
The wind can fast collect.

**Preparation :** Bring a wing, or if that cannot be got, a feather fan, or some feathers sewed together like a wing. Try to spread the wing as a bird does. Beat the air slowly and thoughtfully by waving the wing, and try to perceive how it strikes the air. Now do the same with a piece of stiff paper, or a book-cover, or your hands. Do this all again and again, until you feel a difference.

Now tell me how the air acts under the wing. When you push it slowly downward how does it feel ? When you draw it up, how ? Does the air pass through the wing ? Can it pass through ? Is the wing flat or curved inside ?

Tell how the feathers are laid over each other. Is it necessary that the wing should be light ? Why is it so large ?

What causes it to be light?

The bird can spread it better than you can. It will be difficult to tell much about its action unless it is spread.

Can you see how beating the air with the wing makes a bird go forward? Show how men row a boat. Let us see, if we can, what makes the boat go forward. It is so with the bird. Her wings are like very light, stiff oars. Is her body at all the shape of a boat?

How large do you suppose the largest wings are? Some birds are as heavy as a young child.

(Teacher will try to make this experiment convincing by having it done with pains. Admire the perfection which combines the greatest extent and rigidity of surface with the greatest lightness. Try not to pursue any points far beside those that are included in the Summaries, but many will come up, to be gently dropped. Let the children talk freely, but keep the point of view steady. Save a little time to give an uplift of thought; to enlist right feeling, and admiration of perfection.)

Do you think it is right to have birds killed, that ladies' hats may be dressed with their feathers and wings?

Write the Summary.

## LESSON VII.

## READING LESSON.

He prayeth best who loveth best  
All things both great and small.

—COLERIDGE.

One dealer in London is said to have received, as a single consignment, thirty-two thousand dead hummingbirds, eighty thousand aquatic birds, and eight hundred thousand pairs of wings. A Parisian dealer had a contract for forty thousand birds, and an army of murderers was turned out to supply the order. No less than forty thousand terns have been sent from Long Island in one season for millinery purposes. At one auction alone in London there were sold four hundred and four thousand, three hundred and eighty-nine West Indian and Brazilian bird skins, and three hundred and fifty-six thousand, three hundred and eighty-nine East Indian, besides thousands

of pheasants and birds of paradise.—*From Publications of Society for Protection of Birds in Britain.*

The people of the United States have killed as many as fifty-five million birds in one year: among these, the red-headed woodpecker: and what is the consequence? We are told that in South Carolina, upon a tract of at least two thousand acres of forest, ninety out of every one hundred trees were killed by the ravages of a small bug. Wilson, the historian of American birds, adds, "The woodpecker is the peculiar enemy of these destructive creatures."

(To TEACHER.—Read with class "The Birds of Killingworth," by Longfellow.)

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## LESSON VIII.

### REVIEW QUESTIONS.

What are barbs?

What is a quill?

On which side of the quill is the feather widest?

Which side is stiffest?

What keeps the air and water from passing through a feather?

Why should not the air pass through?

Why should not water pass through?

Why is a wing made so light?

See if you can explain how a bird is pushed forward by its wings.

How are the feathers arranged on a wing?

How on a tail?

What are down feathers?

Tell what three things a bird can do with its downy feathers?

Are feathers easily destroyed?

## CHAPTER II.



### SHELLS.

What hidst thou in thy treasure cells,  
Thou hollow-sounding and mysterious main ?  
Pale glistening pearls and rainbow-colored shells.

(To TEACHER.—By starting an inquiry a few days in advance, shells of the right sort are sure to be brought. The lessons are restricted to those single-valved spiral shells of the mollusks known as Gastropods. But the living mollusk, which is indispensable to Lesson 7, must be sought for in good season. Remember that we are studying the adaptation of the organ to the function.)

### LESSON I.

**Preparation :** Bring all the shells you can get. Select now those that are single, and more or less twisted. Pick out the largest and prettiest.

Hold a shell with its opening toward you, and the closed end up. Always hold it in this way, while we talk about it. Notice how it

winds around. Begin at the upper end and count the turns; be sure you hold the shell still, opening toward you.

How many turns? Can you find as many as eleven turns? Which turn is the largest? Place your finger on the point where the shell begins the twist; that point is called the *apex*. Keep the apex straight up. Trace with your pencil the line that the turns make.

Now point the apex toward you, and trace them again. Count them; count them in a good many shells.

Have all the shells the same number of turns?

Are the coils all of the same size?

(To TEACHER.—The object of this lesson is familiarity, merely, with handling the shell. A few common shells, like the Cowries, appear alike at both ends. The truly spiral form is much varied. The extreme forms should remain unnoticed for the present; use a good typical spiral. A common Winkle will do, but the exotic, prepared shells are so beautiful it is a pity not to have some. Keep the apex of a shell uppermost, as it is the starting point of growth.)

## LESSON II.

Show me the apex of a shell. How should we hold our shells?

When anything is twisted in this way, one turn above another, we say it is *spiral*. When the spiral grows larger, as you leave the apex, it forms a *spire*.

Can you think of something that is called a spire?

Twist a strip of paper into a spire.

Push the paper spiral down by pressing on the apex; now the paper is said to lie in *coils* or rings.

What shape is a shaving?

Pick out the longest spire among the shells. Pick out the flattest.

Find three good words to describe the different spires.

Are any of the shells merely coiled in flat coils?

Look at my watch, or at the clock, and tell how the hands move. Make your fingers move the same way, in the air. Now hold a shell with its apex toward you ; trace the turns from the apex to the opening with your pencil. Do they turn like the hands of a clock ?

Does the mouth of the shell open to the left or to the right ?

If this shell goes on growing larger, where will the mouth be next ?

See if we have different sizes for the same kind of shell.

Do they seem to have grown from small ones to large ones ?

---

### LESSON III.

Copy and repeat the next Summary.

(To TEACHER.—The motion of the hands of a clock, or of the sun's course, is usually instanced to describe circular motion, the words left and right lacking precision, because spiral movement is alternately

in each direction. A very few shells coil the other way ; these are called dextral ; the greater number are sinistral, that is coiling toward the left. It piques curiosity to search for the dextral shells and emphasizes the common form. Turret-shells have long, gently sloping spires. Linger over these various spiral forms, until the variety and uniformity are both appreciated. It makes a good lesson in classification by likenesses.)

---

## LESSON IV.

Lay the shell with the opening downward, apex toward you. The edge the shell rests on is called the *lip*. It is on the right side of the opening.

Describe the lip of your shell. Describe the lips of three different shells.

How are some lips ornamented ?

Are the mouths all shaped alike ?

The creature that lives in the shell has a mouth, and so there is another word for the shell-mouth ; it is **ap-er-ture**.

Describe the aperture of three shells.

Which way does the aperture open, to the left or right ?







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